

CLAIMS

What is claimed is:

1. A binder composition for a non-woven fabric, the binder composition comprising:
 - 5 a latex, the latex including a heterogeneous blend of dispersed polymer particles and a surfactant, where the particles include from about 55 to about 100% by weight of a gelled polymer, from about 1 to about 15% by weight polymeric units bearing an acid functionality, and where dried films of the latex exhibit a Tg of from about -50°C to about 60°C.
 - 10 2. The binder composition of claim 1, where the polymer particles include from about 80 to about 93% by weight of a gelled polymer, where the polymer particles include from about 4 to about 11% by weight polymeric units bearing an acid functionality, and where dried films of the latex exhibit a Tg of from about -35°C to about 35°C.
 - 15 3. The binder composition of claims 1, where the polymeric units bearing an acid functionality derive from acrylic acid, methacrylic acid, itaconic acid, or mixtures thereof, and where the polymeric units bearing an acid functionality comprise from about 0 to about 3% by weight units deriving from itaconic acid, from about 2 to about 7% by weight units deriving from acrylic acid, and from about 1 to about 6% by weight units deriving from methacrylic acid.
 - 20 4. The binder composition of claim 1, where the surfactant includes an alkali metal salt of an alkyl sulfosuccinate, sodium dodecyl diphenyloxide disulfonate, disodium stearyl sulfosuccinamate, or mixtures thereof.
 - 25 5. The binder composition of claim 1, where the surfactant includes from about 50 to about 99% by weight sodium dihexyl sulfosuccinate compounds and from about 1 to about 50% by weight sodium dioctyl sulfosuccinate compounds.
 - 30 6. The binder composition of claim 1, where the polymer particles include from about 35 to about 45% by weight units deriving from styrene.

7. A non-woven fabric bound with the binder composition of claim 1.

8. A diaper sub-layer comprising a non-woven fabric bound with the binder
5 composition of claim 1.